

Abstract

[0033] A longitudinal displacement unit for a shaft assembly includes a profiled sleeve (11) with first ball grooves (12), a profiled journal (21), second ball grooves (22), balls (31) which are arranged in groups in pairs of first and second ball grooves (11, 22), and a ball cage (41) which is positioned between the profiled sleeve (11) and the profiled journal (21) and fixes the balls (31) in their axial position relative to one another. The ball cage (41) contains elastic rolling members which are positioned between the profiled sleeve (11) and the profiled journal (21), so as to be radially pre-tensioned and which, during the transmission of torque, remain largely free from circumferential forces.